with a graphical object displayed in a graphical user interface, said jolt including an impulse of force that rises to a maximum magnitude and then is reduced in magnitude or turned off, said impulse of force moving said button in said degree of freedom of said button.

22. A method as recited in claim **21** wherein said force is in a linear direction and is output by a linear actuator coupled to said mouse device.

23. A method as recited in claim **21** wherein said jolt is output on said button when said cursor is moved between two menu items in a displayed menu.

24. A method as recited in claim **21** wherein said jolt is output with a maximum magnitude dependent on a characteristic of said graphical object with which said cursor interacts.

25. A method as recited in claim **24** wherein said characteristic of said graphical object is a type of said graphical object, wherein said type includes one of an icon, a window, and a menu item.

26. A method as recited in claim **21** wherein said jolt is one of a plurality of jolts included in a vibration force sensation output to said user.

27. A force feedback mouse coupled to a host computer implementing a host application program, said mouse physically contacted by a user and movable in a planar workspace, the mouse comprising:

   a sensor device coupled to a housing of said mouse, said sensor device detecting said movement of said mouse in said planar workspace and to output sensor signals representative of said movement;

   a button coupled to said housing of said mouse and having a degree of freedom and a button sensor for detecting a position of said button, such that when said button is pressed by said user to a predetermined position, a command signal is sent to said host computer;

   an actuator coupled to said button of said mouse, said actuator operative to apply an output jolt in said degree of freedom of said button; and

   a microprocessor local to said force feedback mouse and separate from said host computer and coupled to said sensor device and to said actuator, said microprocessor receiving a command from said host computer that causes said microprocessor to control said actuator to create said jolt in said degree of freedom of said button, said jolt including an impulse of force that rises to a maximum magnitude and then is reduced in magnitude or turned off, said impulse of force moving said button in said degree of freedom of said button.

28. A force feedback mouse as recited in claim **27** wherein said jolt is one of a plurality of sequentially-output jolts included in a vibration force sensation output to said user.

29. A force feedback mouse as recited in claim **27** wherein said jolt is correlated with the interaction of a user-controlled cursor with a graphical object displayed in a graphical user interface.

30. A force feedback mouse as recited in claim **29** wherein said jolt is output with a maximum magnitude dependent on a characteristic of said graphical object with which said cursor interacts.

31. A force feedback mouse as recited in claim **29** wherein said jolt is output when said cursor moves between menu items in a displayed graphical menu.

32. A force feedback mouse as recited in claim **27** wherein a grounded portion of said actuator is coupled to said housing of said mouse and a moving portion of said actuator is coupled to said button.

33. A force feedback mouse as recited in claim **27** wherein said actuator is a linear actuator that applies a linear output force in said degree of freedom of said button.

34. A force feedback mouse as recited in claim **27** wherein said button sensor detects a range of at least three positions of said button in said degree of freedom of said button.

35. A force feedback mouse as recited in claim **27** wherein said output force is dependent, at least in part, on said position of said button in said degree of freedom.

36. A force feedback mouse in communication with a host computer providing a graphical environment, said mouse physically contacted by a user and movable in a planar workspace, the mouse comprising:

   a sensor device coupled to a housing of said mouse, said sensor device detecting said movement of said mouse in said planar workspace and to output sensor signals representative of said movement, wherein said host computer receives said sensor signals and displays a cursor in said graphical environment based on said sensor signals;

   a button coupled to said housing of said mouse and having a degree of freedom and a sensor for detecting a position of said button, such that when said button is pressed by said user to a predetermined position, a command signal is sent to said host computer;

   an actuator coupled to said button of said mouse, said actuator operative to apply an output bump force in said degree of freedom of said button; and

   a microprocessor local to said force feedback mouse and separate from said host computer and coupled to said sensor device and to said actuator, said microprocessor receiving a command from said host computer that causes said microprocessor to control said actuator to create said bump force in said degree of freedom of said button, wherein a plurality of said bump forces are output as a texture sensation when said cursor is moved over a texture area in said graphical environment.

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